

Bridge Inspection									
Bridge File Number	07493 -1 Bridge				Form Type	PSR PCS			
Year Built/Year Supstr	1965/1965				Lot No.	1			
Bridge or Town Name	RIMBEY				Inspector Name	Garry Roberts			
Located Over	MEDICINE RIVER, 3.88, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	761:08 C1 1.050				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	08-Mar-2013			
Legal Land Location	NW SEC 28 TWP 42 RGE 4 W5M				Data Entry By	Marcia Chavez			
Longitude, Latitude	-114:31:47, 52:38:56				Data Entry Date	26-Mar-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien			
Contract Main. Area	CMA18				Review Date	24-Mar-2013			
Clear Roadway/Skew	7.3 / -30 deg. (LHF)				Dept. Reviewer Name	Chris Black			
AADT/Year	150 / 2011 (A)				Dept. Review Date	28-Mar-2013			
Road Classification	RCU-209G-90				Follow-Up By				
Detour Length (km)	3								
Allowable Load (t):	Single		Semi		Train		----> On Critical Spans ---->Critical Member		
Design Loading:	HS20						----> Primary Span		
Posting Information									
Required Load Posting (t)	Single			Semi			Truck Train		
Posted Loading (t)	Single			Semi			Truck Train		
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Remarks									
Hazard Marker At Bridge (Y/N)	Yes								
Remarks									
Other Sign Types									
Utilities (Located at)									
Utility Attachments									
Telephone	In ditch along West side.				Gas	Crosses 50 m South.			
Power	2 wires 10m East r/w. 2 power lines cross 70m North.				Municipal				
Others					Problem (Y/N)	No			
Remarks									
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			7	7	Residence access at SW. Hill on South side limits sight distance.				
Vertical Alignment			5	5					
Roadway Width (m)	8.000								
Approach Bump			7	5					
Guardrail (Y/N)	No								
Guardrail			X	X					
Length (m)									
Current Standard (Y/N)									
Termination Type									
Drainage			4	4	SW ditch erosion gully (photo); partially snow covered.				
Approach Road General Rating			5	5					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PM, 3 Spans, Lengths(m): 9.1-16.8-9.1, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Gravel/snow covered.
Last	60	0	0	0	
Now	80.0	0.0	0.0	0.0	
Wearing Surface			X	X	
(Material Type :)					
(Thickness(mm) :)					
Lateral Connection Problem (Y/N)		No			
Deck Top			6	N	Abraded by gravel in 20% visible areas.
Deck Rideability			7	6	
Deck Joints			N	N	Covered by gravel/snow. Buffer angles partially visible at piers.
Temperature (deg. C)		-9			
(Expansion Type :)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
Deck Drainage			6	4	All drains appear to be plugged. Drains on grade.
Drains Clogged (Y/N)		Yes			
Curbs/Median			N	N	(Top curbs covered with gravel. Fascia scaling. Punchouts in curb fascia West side, span 2, 0.7 lin m. 0.3m spall @ span 1, North pier West curb.) Snow covered.
(Curb Type : Standard)					
Scaling (Percent Area)		7			
Bridge Rail			5	5	Single layer. Scrapes & bends at midspan. Rail galv posts painted, 10% rust showing through.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			7	7	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			5	5	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Girders			7	6	Corrosion spot at S end of G2. Minor construction chip at S end of G9.
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
(Number Of Girders : 9)					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : PM, 3 Spans, Lengths(m): 9.1-16.8-9.1, A-Ident Number:)						
Diaphragms/Cross Frame		X	X			
Bearings		X	X			
Temperature (deg. C)						
(Expansion Type :)						
(Fixed Type :)						
Coating Adequate (Y/N)						
Functioning (Y/N)						
Deck Underside		N	6	Stained at G2/G3, G6/G7 & G7/G8.		
Stains (Percent Area)		3				
Span Alignment Problems						
Vertical (Y/N)		No		Due to skew, twisting, misalignment at ends of girders at curb locations on south pier up to 50mm at SE.		
Horizontal (Y/N)		Yes				
Superstructure General Rating		6	6			
Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Secondary Span : PE)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	60	0	0	0	Snow/gravel covered.	
Now	70.0	0.0	0.0	0.0		
Wearing Surface		X	X			
(Material Type :)						
(Thickness(mm) :)						
Lateral Connection Problem (Y/N)		No				
Deck Top		6	N	Abraded, where visible.		
Deck Rideability		7	6			
Deck Joints		X	X			
Bump (Y/N)						
Deck Drainage		6	4	All drains appear to be plugged. Drains on grade.		
Drains Clogged (Y/N)		No				
Curbs/Median		N	N	Snow covered over gravel with grass.		
(Curb Type : Standard)						
Scaling (Percent Area)		10				
Bridge Rail		5	4	NE terminal connection missing nut on 3/4 bolts.		
(Type : GALVANIZED STEEL FLEX BEAM)						
Bridge Rail Posts		6	N	Post bases are snow covered.		
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)				Galv rail posts painted, 20% rust showing through.		
Bridge Rail/Posts Coating		5	4			
(Type : GALVANIZED)						
Sidewalk		X	X			

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Secondary Span : PE)						
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Girders				7	4	S1G9 has stirrup visible from low cover. S3G1 has spallin S AZ in 1 leg only. S3G2 has visible rebar from low cover.
Last Complete Inspection Date		08-Mar-2013				
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
Lift or Connector Pocket Grouted (Y/N)		Yes				Where visible.
(Number Of Girders : 18)						
Span Alignment Problems						
Vertical (Y/N)		No				Est. 120 mm out of alignment due to skew, twisting of bridge.
Horizontal (Y/N)		Yes				
Superstructure General Rating				7	4	
Substructure						
Bridge Component				Last	Now	Explanation of Condition
Abutments						
(Extended Backwall Piles (Y/N) : Y)						
(Extended Backwall Piles Spacing(mm) : 1800)						
(Total Number of Caps/Corbels : 3:3)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				6	4	Caps cored 08Mar2013. Beginning rot in both top caps of A1.
(Type : TREATED TIMBER)						
(Depth(mm) : 356)						
(Width(mm) : 305)						
Backwalls/Breastwalls				7	5	40mm gaps in A1 backwall; still retaining fill.
Greatest Height (m)		1.40				
Wingwalls				5	3	SE wing pile is broken; planks are presently retaining fill. Damaged tin cap at SW.
(Total Number of Bearing Piles : 9:9)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	2	0	0	1		
Piles				6	3	Piles cored 08Mar2013. Piles under A1 subcap are buried. Rot in AsP7 & beginning rot in A1P1.
Paint/Coating				X	X	
Abutment Stability				7	5	
Scour/Erosion				5	4	Erosion at both hslps; not yet affecting abuts.

Substructure						
Bridge Component				Last	Now	Explanation of Condition
Piers/Bents						
(Type : PIER-COLUMN)						
(Total Number of Caps/Corbels : 12:12)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		Each pier has 3 rows of top caps with each cap in 2 sections - 6/pier. Also 6 corbels at each pier. Caps cored 08Mar2013. P1 E corbel is crushing 15mm; 4 other corbels have beginning rot. Rot in P1 middle W cap & beginning rot in middle E cap and S caps. P2 has rot in W middle cap and beginning rot in both S caps.
Last	0	0	0	0		
Now	0	0	1	2		
Bearing Seats/Caps/Corbels				4	2	
(Type : TREATED TIMBER)						
(Total Number of Bearing Piles : 12:12)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		Double row of 6 plus 1 nose pile. Piles cored 08Mar2013. P1, S piles: P4 has rot, P1,3,6 beginning rot. P1, N piles: P6 is cracked 60mm & bulging at water/ice and P2-4 all have beginning rot. P2, S piles: P2-3 have rot, P1,4-6 beginning rot. P2, N piles: P3 has rot, P1-2 have beginning rot.
Last	0	0	0	0		
Now	0	0	1	4		
Pier Shaft/Piles				6	2	
Greatest Height (m)		4.70				
Bracing/Struts/Sheathing				4	3	Sheathing - requires lowering 3 planks on S pier & 1 on N. Several loose planks.
Nose Plate				5	5	
Paint/Coating				6	5	Galvanized nose sheeting only; minor rust lower 1m.
(Colour Description :)						
(Colour Code :)						
Pier Stability				5	3	Crushing corbel & bulging pile.
Scour				4	N	Ice
Debris (Y/N)		Yes				Old piles in streambed; debris caught on NE fence. Minor drift at d/s end of P2.
Substructure General Rating				4	2	
Structure Usage						
				Last	Now	Explanation of Condition
Channel						
(U/S Direction : W)						
(D/S Direction : E)						
Alignment				7	7	
Bank Stability				7	7	
HWM (m below Top of Curb)						HWM not visible.
Drift (Y/N)		Yes				Minor drift and debris at d/s end, P2.
Slope Protection				5	5	Some material loss from flood - stable.
(Type : NATURAL; NATURAL)						
Guidebank/Spurs				X	X	
Adequacy of Opening				6	5	
(Fish Compensation Measure 1 : NONE)						
(Fish Compensation Measure 2 : NONE)						
Channel General Rating				5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Install 3 nuts at NE wing end.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2013	Patch hole in S2 West curb, if not yet done.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING	2013	Remove gravel from curb top.					
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP	2013	Armour SW ditch erosion; extend to SW hslp, 20m3 CL1 + 30m3 pitrun on filter fabric.					
REMOVE DRIFT ACCUMULATION	2013	At P2 and 5 old piles.					
OTHER ACTION	2013	Lower sheathing both piers approx. 30Lm, 75x205 TT. Consider widening both pier bases & pouring reinforced concrete footings in boxes.					
OTHER ACTION	2013	Excavate to expose and core A1 subcap piles.					
OTHER ACTION	2013	Assess strategy - if not done. (Do assessment before any repairs.)					
OTHER ACTION	2013	Replace all caps and corbels. Repair/replace rotted piles A2P7, both piers and SE wing.					
OTHER ACTION	2013	Inspect min. annually until repaired or replaced.					
OTHER ACTION	2013	Consider barricade closure of E shoulder.					
Structural Condition Rating (Last/Now) (%)	55.6/33.3	Sufficiency Rating (Last/Now) (%)	65.1/54.9	Est. Repl. Yr	2017	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	(Inspect every 12mths. SB 20Apr2000). Currently not being inspected as per Stu Becker's recommendation in 2000. ERY can be extended to approx. 2025-2030 with substructure repairs - G.Roberts 08Mar2013. LRA sent to Donald Saunders & Chris Black on 08Mar2013.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava	Previous Assistant's Name					
Next Inspection Date	08-Jun-2016	Previous Inspection Date	06-Jan-2012				
Inspection Cycle (Default) (months)	39						

Comment	
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